

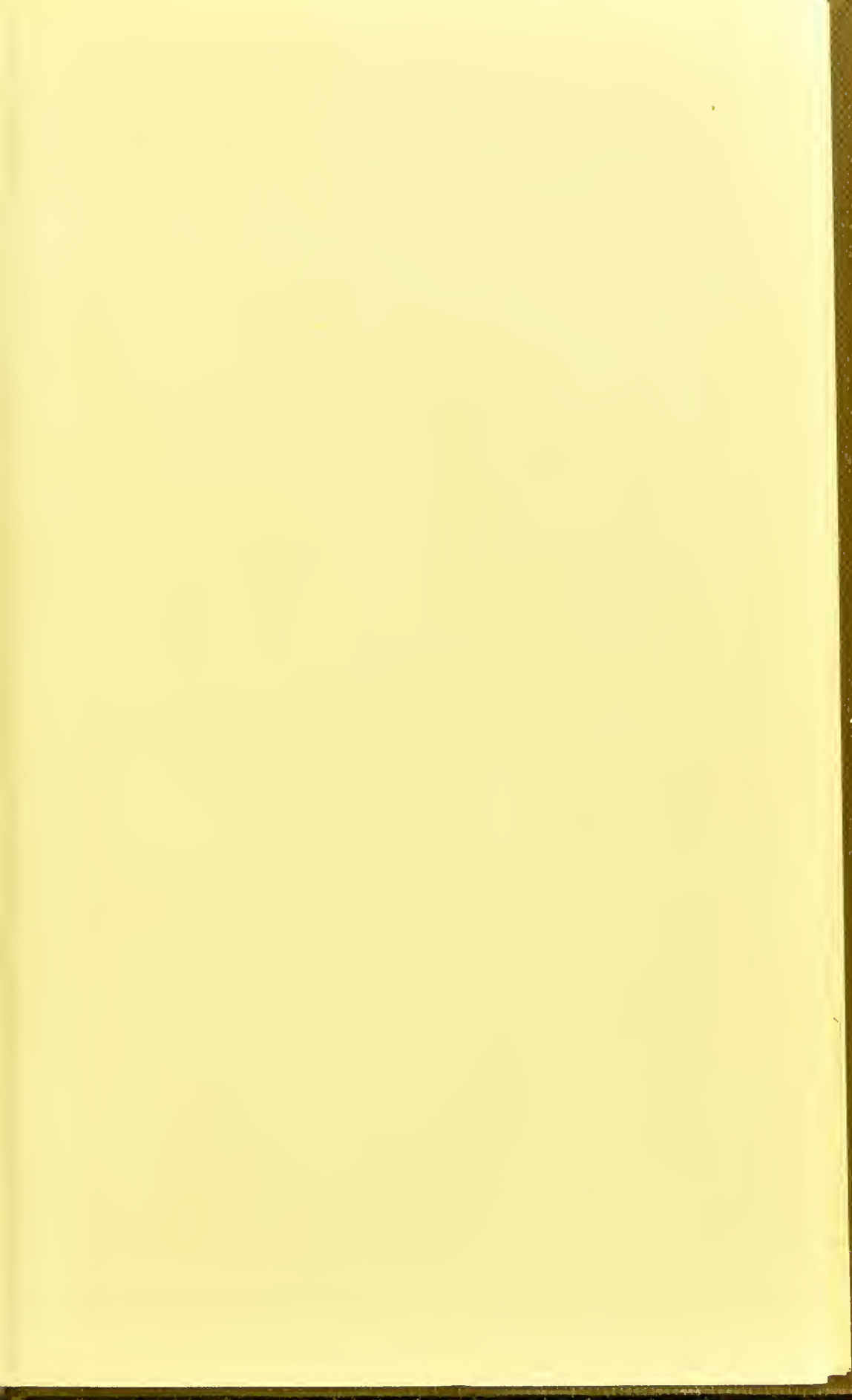


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# A LETTER

ON THE EFFICACY OF

## MINERAL WATERS

IN

### THE TREATMENT OF CHRONIC DISORDERS.

ADDRESSED TO

G. SCHWEITZER, ESQ.

Director of the Royal German Spa, Brighton.

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"Gutta cavat lapidem non vi sed sæpe cadendo."

OVID.

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BY

JAMES PICKFORD,

FORMERLY OF THE FIRST OR GRENADIER REGIMENT OF FOOT GUARDS, LATE SENIOR SURGEON  
TO THE BRIGHTON GENERAL DISPENSARY, SENIOR SURGEON TO THE SUSSEX AND  
BRIGHTON INFIRMARY FOR DISEASES OF THE EYE,  
&c., &c.

BRIGHTON:

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1840.

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## A LETTER, &c.

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DEAR SIR,

In compliance with your request, I readily bear my testimony to the very superior efficacy and curative properties of Mineral Waters in the treatment of many chronic disorders.

From the earliest ages, mineral springs have been resorted to for the cure of disease. By the Greeks, they were dedicated to the gods. They are mentioned by Hippocrates, Galen, and Aristotle, who employed them in stone and gravel, in paralysis, and nervous affections. Horace, in his epistle to Numonius Vala, speaks of the advice given him by his physician, Antonius Musa, with regard to the sulphureous waters of Baïæ, cele-

brated for the cure of the gout; and in the same epistle also mentions those of Clusium and Gabii:

“.....nam mihi Baias  
Musa supervacuas Antonius: et tamen illis  
Me facit invisum, gelidâ cum perluor undâ  
Per medium frigus. Sanè myrteta relinqui,  
Dictaque cessantem nervis elidere morbum  
Sulfura contemni, vicus gemit, invidus ægris,  
Qui caput et stomachum supponere fontibus audent,  
Clusinis, Gabiosque petunt,.....”

Vitruvius, Seneca, Pliny, Oribasius, Aetius, and others, have all, in their turns, lauded mineral springs. In Italy, towards the close of the 15th century, their employment became pretty general. In France, as far back as during the reign of Charlemagne—the wonder and admiration of the dark ages—that monarch constructed a large bathing house at Aix-la-Chapelle; whilst, in a more advanced period, the noble Henry IV. directed letters patent to be issued, appointing inspecting physicians at all the different springs in his dominions.

From this time, the use of Mineral Waters became daily more and more extended, whilst observation and experience led to their more accurate and efficient employment.

So many objections, however, have been and are still made to Mineral-water-drinking, by the



profession on the one hand and by patients on the other; so many prejudices and erroneous notions are both entertained and propagated on the subject; so many unjust and illiberal observations continually advanced both by the ignorant and the well informed, that I feel a few remarks on this head will neither be misplaced nor irrelevant.

It is not my intention upon this occasion to enter into a lengthened dissertation on the natural history, origin, composition, virtues, and analyses of Mineral Waters; these points will be fully discussed in a work which I am engaged in preparing for the press, descriptive of most of the European and other known springs. To shew the necessity for such a publication, I need only remark that the medical literature of this country is destitute of any standard work of reference on the subject.

Mineral-water-drinking is so little understood on this side the channel, that but comparatively few medical men have had their attention directed to it; and if by accident they be called upon to afford information to an enquiring patient, they either at once admit their ignorance, or boldly hazard an opinion, if such it may be called, which, if followed, would probably entail upon the patient much discomfort, perhaps increase of disease and suffering: whilst, on the other hand, there are

those who characterize Mineral-water-drinking as arrant folly, worse than useless, destructive of the tone of stomach, of the general health, and a fruitful source of dropsy !

Again, the patient, when directed by one capable of giving an opinion, to take a course of Mineral Waters, objects to its duration, to the early rising, to the “enormous quantity” to be drunk, to the restrictions in diet, and in fine, to a “thousand and one” other imaginary inconveniences and *désagréments* the necessary results he imagines of the plan proposed to him. He believes that were he to take a tea spoonful or two of Epsom, Glauber’s, Rochelle, or other neutral aperient salt, in a tumbler of warm water, a couple of hours before breakfast each morning, and were he to take gentle exercise in the open air during a portion of that period, that he would derive advantages equal, if not superior, to those to be obtained from a course of Mineral Waters. Now against these most erroneous notions I beg to enter my protest. That early rising, soluble bowels, exercise in the open air, and well regulated diet, are conducive to health, no one will attempt to deny ; but to suppose for an instant that they are equivalent to, or even substitutes for, a course of well-directed Mineral Waters, is as fallacious as it is untenable, and is contradicted by every day’s experience. They can only be ad-

mitted as adjuvants to a course of Mineral Waters.

It has been truly observed by a recent continental writer, that "Mineral Waters are so indiscriminately prescribed in the greater number of chronic disorders, that very many medical men are disposed to ascribe but little virtue to the Waters themselves, and to attribute the cures which they effect to the journey, to change of air, to climate, &c. &c. ; but," continues he, "Mineral Waters are neither a universal remedy nor a specific;" and yet it has been asked, "how can one remedy cure all diseases?" We have never spoken of "*one remedy*" as a cure for all diseases. We do not profess "*eodem collyrio mederi omnibus.*" Mineral springs are almost as numerous as the disorders are varied for which they are prescribed, and over one or other of which they are celebrated for the healing influence they exercise. The business of the practitioner is in the judicious selection of the one best suited to the patient's individual case.

Though chemistry, than which, perhaps, no branch of science has made more rapid strides during the last quarter of a century, has revealed to us the constituent principles of mineral waters, yet the knowledge of their effects upon the animal economy is neither generally disseminated nor properly understood. Reasoning upon their *action*



*and therapeutic virtues, from their chemical analysis alone, is positively impracticable.*

Their nature is so complex, that unlike the ordinary remedies of the physician, it is impossible to say *a priori* that any given spring will cure any given disease. This we are able to affirm only from the result of experience. Carlsbad waters, or those of Vichy, for instance, contain no ingredient which could point them out as efficient remedies for the relief of congested liver or spleen ; and how, save by experience, could we know that bronchial catarrhs and chest affections are benefited by the waters of Ems or Cauterets ; gout, scrofula, and disease of the bones, by those of Baréges ; or many diseases of the sexual system by those of Kissingen or Mont-d'Or. The experience of ages and daily observation can alone guide us.

It has not unfrequently occurred, that patients have come to consult me as to which water they should take, bringing in their hands an analysis of the various springs, and expecting me to reason with them upon the chemical composition of this or that with reference to their own complaints, as though Mineral Waters were remedies of an ordinary character.

Indeed, this mode of estimating the medicinal properties of Mineral Waters is not alone confined

to patients; many members of the profession entertain similar ideas. Within the last six months, I have had several applications from medical men, residing in the north and midland counties, for the analysis of the waters prepared at the Royal German Spa, Brighton, in order that they might select therefrom the one best suited in their judgment to the cases for which they were about to prescribe.

It is to be hoped that the time is now fast approaching, when a competent knowledge of the effects of Mineral Waters will be more generally diffused throughout the profession, and that such powerful remedial agents will receive that attention which they so justly merit.

## MINERAL WATERS

Are naturally divided into hot and cold. These, again, have been subdivided, by writers on the subject, into—1, simple cold; 2, simple thermal; 3, simple saline; 4, highly carbonated alkaline; 5, simple carbonated chalybeate; 6, hot carbonated chalybeate; 7, highly carbonated chalybeate; 8, saline carbonated chalybeate; 9, hot saline highly carbonated chalybeate; 10, vitriolated chalybeate; 11, cold sulphureous; 12, hot alka-



line sulphureous. Late writers, Murray, Alibert, and others, have adopted a far less complex, yet, at the same time, more general classification: they comprise all, both thermal and cold springs, under the four classes of—1, carbonated; 2, sulphureous; 3, chalybeate; 4, saline.

But even this, simple as it may appear, and chemically correct though it be, may yet give place, practically, to an arrangement which readily suggests itself.

I have found the subject much simplified by classifying all Mineral Waters, not according to their chemical composition and properties, but according to the effects they produce upon the animal economy—thus,

1. ALTERATIVES.

2. TONICS.

3. PURGATIVES.

These three divisions will embrace every variety of Mineral Water, both thermal and cold, and as the effects of any given water of any single class, must be associated in the mind of the practitioner, with the effects of the particular class to which it belongs, he will have no difficulty in making his selection of that which the nature of the case before him demands.

## THE ALTERATIVES,

Of which the waters of Carlsbad, Ems, Cauterets, Wiesbaden, Bonnes, Vichy, Marienbad, Kissingen, Obersaltzbrunnen, Adelheidsquelle, and Saratoga, are familiar examples, possess the property of effecting a salutary change in the condition of the affected organs, and thereby a restoration of their normal functions. They exercise a very powerful effect upon the brain, cerebro-spinal nerves, and ganglionic system, and upon all the secretions and excretions, and are therefore beneficial in some cases of paralysis, tic douloureux, and in spinal irritation; also in chest affections, where tubercles of the lungs are not yet developed, in abdominal and visceral derangements, in gout and rheumatism. Over the uterine and generative systems they exert a peculiar and singularly felicitous influence. In short, *functional derangements* of the nervous, respiratory, circulating, assimilative, secerning, glandular, and sexual systems, are all susceptible of relief from this class of Waters.

Organic lesions are for the most part aggravated by Mineral Waters.

Were we to consider the complex nature of the assimilative system only, we should not wonder at the various ills

“That flesh is heir to.”

Let us take a rapid survey of the processes of digestion and nutrition, we shall then be struck with the beautiful harmony which pervades the whole, and shall be better able perhaps, to estimate the evil consequences which might ensue from even the slightest derangement in any of the subservient processes.

First, then, the food must be thoroughly masticated and moistened with a due quantity of saliva, before it is fitted for the stomach. Upon its arrival there, that organ secretes a powerful fluid in order to dissolve it, and then agitates it to and fro to assist its solution. From four to six hours are required to effect this with any substantial meal. In the pultaceous form to which it is now reduced, it is allowed by the sentry, who keeps guard over the outlet of the stomach, to pass into the duodenum where it meets and is commixed with the secretions of the liver and pancreas. The lacteal vessels now begin to absorb the nutritious portion of the chyle, and convey it to the mesenteric glands, where it is filtered and deprived of any acrimonious matter which may enter into its composition. From hence the lymphatics carry this strained and purified fluid into the veins, where it is mixed with the blood and sent the round of the circulation. The refuse matter is voided directly by the bowels, indirectly by the kidneys and exhalants.

Let us suppose for an instant, that the food is not sufficiently masticated, or that the stomach fails in its duty: the perfect harmony is immediately disturbed, the absorbents and mesenteric glands are irritated, the latter may consequently become enlarged, impure chyle is commixed with the blood, the circulatory system is disturbed, and through it, the nervous and respiratory functions deranged. Or, suppose that the liver becomes congested or inactive, or that the bowels become torpid and obstinate, retaining the excrementitious and refuse portions of the food; nausea, headache, and *muscæ volitantes* may be the consequences of these local disturbances. A continuance of these derangements, may produce *tic douloureux*, palpitation of the heart, cough, hemorrhoids, cutaneous eruptions, may be, gout or rheumatism: each organ becoming more and more disturbed, a train of formidable symptoms might arise, simulating or creating organic disease, of a dangerous or even fatal tendency.

It has been fully established by the experiments of Sir Benjamin Brodie, and of my lamented friend, the late Mr. Broughton, of the 2nd. Life Guards, that the absorbent vessels of the stomach and small intestines, exercise a rapid absorbent power upon all substances which come in contact with them. These gentlemen discovered



in the urine, not only by the color, but by analysis, the presence of rhubarb and other ingredients taken into the stomach *three minutes previously*. If, then, fluids find so ready an ingress into the circulation, through the absorbents of the stomach, small intestines, and mesentery, to the portal system, the liver, and other important organs, is it not easy to understand how a remedy, which, like Mineral Waters, actually comes in contact with the disordered organs, and permeates their most intimate structure, is so well calculated to excite a healthy condition of the deranged viscera, and a consequent restoration of their usual functions? The organs, under this mode of treatment, are content not to rebel at the remedies; they tolerate the foe who has sprung a mine, and is thus attacking them from *within*—the foe, who is now stalking through their ranks, dislodging the enemy, and freeing the citadel from a dangerous adversary.

It sometimes happens, that the stomach rebels at ordinary medicines; that the constitution frequently suffers from their use, whilst the health is often completely broken up by them. Long continued and oft repeated courses of blue pill, for disordered livers, have inflicted no little injury upon delicate habits, the original disorder still continuing unabated, or being only held in check,



and ready to burst into activity upon the most trivial act of indiscretion on the part of the afflicted patient.

Alterative Mineral Waters require no little judgment in their application to individual cases, The thermal waters, Carlsbad and Ems especially, are quite capable of producing great disturbance in the constitution, if misapplied. Their use ought, as a general rule, to be preceded by one or two aperient doses; and if the tongue be loaded, the breath offensive, the urine scanty and high-colored, and if tenderness or fulness of the right hypochondriac region be present, then is it advisable to apply cupping glasses over the region of the liver, or leeches to the hæmorrhoidal veins. The patient may then cautiously and gradually commence his course.

During a course of alterative waters, purgatives, generally speaking, are inadmissible; and therefore, it should be strongly enforced on the patient to avoid them as much as possible. Many, nay, most persons, have an idea that all Mineral Waters are merely solutions of aperient salts, and that unless they purge the bowels they are "not doing any thing for them:" whereas, on the contrary, when their action is disturbed by purgatives, their peculiar effect is lost to the patient, who has only himself or his prejudices to blame if he do not derive

those advantages which he has been taught to expect, and which he would most probably have enjoyed, had he been less anxious about ensuring an aperient effect. They do not act as purgatives, until, by their peculiar action on the liver and aggregate glands, they provoke them to increased secretion, and thereby *secondarily* induce purging. Occasionally they excite some abundant excretion, hæmorrhoidal discharges, eruptions, or fever.

This is the ordinary mode in which most of this class of waters act. Sometimes, however, no very sudden or marked effect is experienced. The patient's health gradually improves, amendment follows amendment, until he finds, at the end of his course, that all his former ailments have left him, and that he is again restored to health and strength. He must not, however, be discouraged by an increase of his symptoms, or even by the accession of new ones, and of more aggravated character. For example, in cases of disturbance of liver, I have often seen cough and rheumatism superinduced as a natural consequence of the remedy attacking the disorder; a war, as it were, breaks out in the constitution, the disorder is aggravated for a time, terminating, for the most part, in a restoration to health, through some one or other of the critical evacuations above referred to.

On the other hand, constipation is to be guarded against most carefully. Should the bowels be torpid or inactive, a tea spoonful of the Carlsbad salts may occasionally be added to the first beaker, or such other mild aperient may be taken as the medical attendant may direct, and which will not interfere with the action of the waters themselves. But this must only be done when it is absolutely necessary.

The peculiar action induced by Mineral Waters on the constitution, continues to be experienced long after the course has terminated. The waters, especially the alteratives, have insidiously found their way into the vital fluids, and do not cease for some considerable time to exert their specific influence upon the organs through which they circulate. Indeed, it frequently happens that patients do not experience any diminution of their symptoms during the time they are taking the waters, but, on the contrary, as has been observed above, they may find their disorder increased, or new symptoms added to their former ailments ; and it is not until some weeks have elapsed, that they reap all the benefit which the waters are capable of effecting. A remarkable case of this kind came to my knowledge some little time since. A gentleman from the eastern part of this county, who had suffered severely from *tic douloureux*, came to

Brighton, for the purpose of taking the factitious German waters, for the cure of his distressing malady. He left Brighton, after a lengthened course, his symptoms being aggravated rather than diminished. After his return home, however, he gradually improved, the paroxysms became less and less violent, and ultimately he regained perfect health.

Patients are sometimes compelled to take a course each year, for two or three consecutive years, and, occasionally, two in one year. In the latter case, the first course should be the longer of the two, an interval of a month or six weeks being allowed to elapse before the commencement of the second.

It is absolutely necessary that the same cautions which have been observed during a course of Mineral Waters, should be continued for some time afterwards. The clothing and diet must also be carefully attended to, neither should the bowels be disturbed by purgatives, nor by mercury in any shape.

I shall now pass on to the consideration of

### THE TONIC WATERS.

These are highly serviceable in many cases of pure debility, after great losses of blood, in deli-



cate children, and in young females. Their use is, however, far too indiscriminate. I have frequently seen them prescribed to relieve that debility which is dependant upon some visceral derangement, such as affections of the chest, and congestion of the liver and portal system. Now in any of these cases, they must and will aggravate the original disorder, and thereby increase the debility which they were intended to remove. Too much caution cannot, therefore, be exercised in the use of these waters. Let me not however be misunderstood. I am not desirous of conveying an idea that they are dangerous remedies when properly prescribed. It is of their injudicious and indiscriminate employment of which I speak.

During their use, it is absolutely necessary that the bowels be kept in a soluble state, otherwise head-ache, vertigo, epistaxis, and other uncomfortable symptoms may arise. The best aperient, when necessary, will be either a mild pill at bedtime, or a glass of one of the aperient waters in the morning.

#### THE APERIENT SPRINGS,

Of which those of Püllna and Seidschütz are examples, will be found a very serviceable class of mineral waters. They are, for the most part,



employed previously to the commencement of an alterative course, in cases where plethora of the abdominal viscera exists. Occasionally they are used in acute disorders, as an agreeable and cooling aperient.

I shall conclude this division of my subject with a few general observations on diet, clothing, bathing, and exercise, with reference to the mineral water drinker.

*Diet.*—During a course of mineral waters the diet demands particular attention. All *crude* vegetables and fruits must be abstained from. Heavy puddings, salted meats, fish and flatulent vegetables must be avoided. Wine must be taken in moderate quantity, and diluted with water, otherwise head-ache may supervene; for the same reason the quantity of malt liquor must be diminished. During a course of warm waters, *cold* drinks and *ices* must be refrained from. Tea, especially green, if taken, should be weak, as it combines with the iron in the waters. It is better to avoid it altogether, and in its stead to take coffee, cocoa, or chocolate. Strong coffee is however objectionable where irritation of the mucous surfaces of the air passages, stomach, or alimentary canal, exists, and in follicular dyspepsia.

*Clothing.*—The patient should be sufficiently clothed to protect him from the variations of tem-

perature incident to our insular position, especially during a course of *warm* alterative waters, otherwise the increased cutaneous excretion occasioned by the waters will be checked, and, as a consequence, other organs, probably the kidneys, will be called upon to perform increased duties in order to balance the circulation. A proper attention to clothing, is, next to a due regulation of the bowels, one of the most important considerations to the mineral water drinker, diet not even excepted.

*Cold bathing*, having a tendency to check the cutaneous excretion, and thereby to interfere with one of the peculiar actions of thermal waters, must not be employed. *Warm bathing*, on the other hand, will materially assist the action of the waters and contribute to the patient's recovery. In cases where the head or chest is affected, and where the use of the warm bath might prove hazardous, the warm shower-bath will be found an efficacious substitute.

*Exercise* should be gentle, and not sufficiently strong to hurry the circulation or to induce much perspiration. Drowsiness should be guarded against, especially after meals, otherwise headache, vertigo, or other unpleasant symptoms, might occur to interrupt the course.

## THE ROYAL GERMAN SPA, BRIGHTON.

It yet remains for me to speak of this establishment, and of the many advantages which present themselves, locally and generally, to invalids repairing hither in search of health.

This town is so highly favoured, both with regard to climate and position, that it would be difficult to find any other place in our island so well adapted for an establishment of the kind. The salubrity of its climate is almost proverbial. The air is dry and tonic; and the temperature is from a degree, to a degree and a half, warmer than that of any other place on the southern coast, where an equal quantity only of rain falls. The eastern, central, and a portion of the western part of the town, are situate upon chalk; the extreme western, upon clay. This end of the town is lower and milder than the eastern cliff, and is consequently better adapted for invalids labouring under chest affections. The east cliff has also its advantages, being better suited for individuals of a relaxed fibre than the opposite end of the town. Many persons who cannot exist at the west end

of the town—in Brunswick Square and Terrace, for instance—enjoy the most uninterruptedly good health on the upper part of the Marine Parade and Kemp Town, and *vice versa*.

If we travel to the eastward or to the westward of Brighton, we cannot but be struck with the immense change which occurs. To the eastward, the air is dry, keen, and cold; whilst as we go westward, we find the climate gradually becoming warmer, moister, and more genial.

Persons on first coming to Brighton from an inland situation are very liable to slight biliary derangements, owing probably to the bracing air acting upon the surface, and checking the insensible perspiration, thus producing congestion of the liver and abdominal viscera. This should be borne in mind by the invalid resorting hither for the purpose of taking the waters.

The factitious waters, prepared at the Royal German Spa, Brighton, are, in my opinion, identical in their *effects* upon the human constitution with the waters of the various springs whose names they respectively bear. This opinion is not the result of a limited observation, but of a most ample experience in a great variety of cases, from the opening of the establishment in 1825, up to the present time, during the last eleven years of which period I have had, as a medical practitioner

in Brighton, abundant opportunities of observing their salutary and powerful influence over disorders which had resisted the ordinary remedies, and baffled the skill of some of the most distinguished members of the profession.

I shall annex a few cases as examples of those disorders, for the cure of which the natural springs are celebrated, as strong evidence of the *identity of action* of the factitious waters with the native springs, the most obstinate cases yielding to their curative powers as readily as they are wont to do at the springs themselves. As to their indentity of *chemical composition*, I need only refer to the strong testimonial on this point, of that profound chemist, Dr. Faraday, of the Royal Institution, and to those of many deservedly celebrated continental chemists, Berzelius, Hoffmann, Bischoff and others.

Establishments for the preparation of factitious waters offer, in certain cases, advantages to the practitioner which the native springs themselves do not possess. I allude to the opportunity here afforded him of combining and administering two or more waters of any particular class, or of even a totally different character, *due regard being had to their chemical composition*.

This advantage may at first sight appear rather equivocal. A little reflection will, however, shew



that in practice it is a matter of real importance. Thus, in delicate individuals, when the Carlsbad might prove too powerful, it may be moderated by a little Ems; or where it does not act sufficiently on the bowels, a little Marienbad, the cold Carlsbad, may be added to it.

Cold waters, *excepting chalybeates*, may, in most instances, be warmed by a little of one or other of the springs of Carlsbad or Ems, if nothing exist in the composition of either to forbid it, where the former might disagree with the stomach.

Another advantage is, that the temperature of the cold waters can also be increased and varied, according to the wish of the prescriber, if, in their natural state, they be considered too cold for the stomach. This is effected without any change taking place in the composition of the water itself, and without loss of its gaseous contents, the heating being conducted in hermetically sealed vessels, by means of a water bath. Thus the Kreutzbrunnen of Marienbad, the natural temperature of which is 53° Fahrenheit, is also kept at the establishment at a temperature of 100° Fahrenheit, a circumstance of no trifling consideration to the invalid.

An aperient water may be combined with a chalybeate, or a chalybeate with an alterative, without any diminution of the medicinal efficacy

of either of them ; but, on the contrary, with the most desirable results, provided care be taken that no decomposition can take place between them.

Again, where it is found that the waters do not sit pleasantly on the stomach, they may be charged, by the direction of the prescriber, with an increased quantity of carbonic acid gas, in order to render them more digestible. Or, on the other hand, if it be found that the carbonic acid gas excite the sensorium, and occasion vertigo, head-ache, or any other disagreeable symptoms, the waters can be prepared with a smaller quantity of gas to suit such cases.

There are also other circumstances which render establishments of the kind in question even more desirable for certain invalids, than the native springs. For instance, in spinal irritation, complicated with abdominal or thoracic disorder, sea voyages, long journeys over rough roads, in carriages perhaps not of the most easy description, might and probably would prove very prejudicial.

It sometimes happens that a patient is sent by his medical attendant to a particular spring, in Germany, Lombardy, or the Pyrenees, as the case may be, but, upon his consulting the resident inspecting physician there, he could tell him, if he would, that the waters of that particular locality were calculated only to aggravate his disorder,

and that he had better retrace his steps, or repair to some other distant Spa for that relief which he would in vain endeavour to obtain from the one at which he had just arrived, probably after a fatiguing, exhausting, and expensive journey.

Now at Establishments like this, of which there are several on the continent, these objections cannot and do not apply. Should a patient be directed by his medical attendant to take any particular water, and should it be found upon trial to disagree with him, he has no long journey to undertake, no loss of time over which to grieve, he has only to drink of such other spring, as, under the circumstances, may then be prescribed for him. Instances of such misdirection are of frequent occurrence.

The following cases, taken almost indiscriminately out of a large number which have occurred in my own practice, may serve to shew the efficacy of the Alterative Waters prepared at the Royal German Spa, Brighton.

## CASE I.

## INVETERATE CASE OF JAUNDICE, WITH BILIARY CALCULI.

A gentleman, residing in London, aged 55, of bilious temperament and abstemious habits, had been the subject of jaundice at various periods, for upwards of twenty years. The attacks had become much more frequent during the last five or six years, and were always preceded by most excruciating pain at the pit of the stomach, which generally lasted for several hours. The usual remedies, including bleeding, cupping, calomel and opium, &c., had been unavailingly resorted to; indeed, during their use the symptoms had latterly increased rapidly. Mercury was, at the suggestion of my valued friend, Dr. Johnson, Surgeon Major, Grenadier Guards, rubbed over the region of the liver, and blue pill administered each night. This plan was, by my direction, persevered in for many weeks, until the gums became affected, but without any diminution of the symptoms; on the contrary, the disorder was so much aggravated, that the patient and his friends became apprehensive of the results.

Taraxacum and soda were next liberally administered, but with the same want of success. Some months after this, the patient came to Brighton. He was then much



emaciated. Countenance of a dirty brown colour, and conjunctivæ intensely yellow; pulse, slow and small; tongue, white; urine, scanty and dark as porter; bowels, generally costive. He stated that he felt he was “dying by inches,” and that the pain he endured every night was so agonising that he believed he could not much longer exist. The pain usually came on when he was asleep in bed, about one o’clock in the morning, and was attended with constant vomiting, and cold clammy sweats. Its duration varied from eight to twelve, or fourteen hours. It generally passed off as suddenly as it came on.

I now directed him to take the Carlsbad waters, commencing with the Mühlbrunnen, and gradually ascending to the Sprudel. Warm baths were also ordered for him every other day, and the state of the bowels carefully attended to.

It is most remarkable, that although this patient had not passed a night for very many months—I had almost written years—without being awoke from pain, yet, during his stay here of seven weeks he was only attacked once, and then it was during the *day-time*, immediately preceding his leaving Brighton, and only for about a quarter of an hour.

His appearance improved most remarkably during the period of his taking the waters. The secretions became more healthy, the bowels more regular, and the urine pale and in good quantity. Many small gall stones were voided each day without any previous pain. His skin became clear, he gained flesh, his appetite returned, his spirits revived, and, in short, he appeared another being.

Business now called him to town, and he therefore ceased to take the waters. He was taught to expect that there were other and larger gall stones yet to be parted with, and that it was probable he would have a severe attack of pain when that happened. A fortnight after his return to town, he was seized as before, in the night, with the most excruciating agony, which continued for fourteen hours. His friends becoming alarmed, sent for their medical attendant. He administered, very opportunely, a large opiate, soon after which, the pain ceased, and hundreds of gall stones rushed out into the bowel. From this time the patient continued to pass biliary calculi in immense quantities; indeed, with so many did he part, that he facetiously told me some little time since, "he had a collection sufficient to Macadamize half of London." He is now, July 1840, in the enjoyment of a very fair share of health.

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## CASE II.

### SUPPRESSED GOUT, WITH BLEEDING PILES.

A lady, about 58 years of age, whose health had suffered most seriously from repeated and copious hæmorrh-

hoidal discharges, consulted me in the summer of 1837 as to the best means of invigorating her enfeebled and exhausted frame.

She was blanched and exsanguined, and could scarcely articulate. She complained of flying pains in her head, tinnitus aurium, and vertigo, darting pains through her heart, palpitations, cramp in the stomach and bowels, nausea, and eructations. In short, there was an anomalous train of harassing and distressing symptoms, threatening her existence each minute. Her pulse was hæmorrhagic and fluttering, and her appearance that of an animated corpse. She was taking a preparation of steel, by the direction of an eminent physician in London; but no sooner was her health restored in the slightest degree, than another rush from the hæmorrhoidal vessels undid all that had been gained.

Believing the symptoms to depend upon suppressed gout, I directed her to take Ems waters, under the hope that if gout were lurking in the system, it would come to an outbreak. Her exhausted state rendering it impossible for her to quit her bed, the waters were sent to her house.

At the expiration of a fortnight she suffered one of the most severe fits of gout I ever witnessed.

The waters were continued through the attack, and were not withheld until long after it had disappeared. The hæmorrhagic discharges ceased, or very nearly so; and this patient, who was not supposed capable of reaching Brighton alive, was so far recovered at the end of two months, as to find herself able to take daily drives in an

open carriage. In the November following, she returned home in the enjoyment of full health and spirits.

This lady laboured under every disadvantage, being compelled, from her reduced state, to have the waters sent to her house, a circumstance in itself calculated to impair their efficacy; and from the same cause, being confined to her bed, was precluded taking exercise in the fresh air, whilst early rising could lay claim to no share of the recovery. Yet it has been shewn, at page 6, that to these grand auxiliaries the sole merit of the cure is often ignorantly attributed. This case is a sufficient answer to these erroneous opinions.

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### CASE III.

CONGESTION OF LIVER, WITH SPASMODIC COUGH.

A medical gentleman became, during the winter of 1836 and 1837, the subject of influenza. Increased duties arising out of the prevailing severe epidemic



prevented him taking that care of his health which his symptoms demanded. Under the combined circumstances of illness and great bodily and mental exertion, his stomach acquired a thorough disgust for almost every kind of food ; but as the calls on his physical powers demanded something in the way of nourishment, he took, unfortunately, that which a perverted and disordered appetite pointed out. For months he lived upon highly salted and smoaked meats, and bottled ale. The result was a violent spasmodic cough, dependent upon congested liver, the consequence of his improper diet.

He resorted for some time to various remedies for relief, but without success.

During the summer of 1837, he took, with very great advantage, a course of Marienbad water, preceded by the application of eighteen leeches to the hæmorrhoidal veins, in order to unload the portal system. A second course, during the autumn of the same year, completely removed all his symptoms, and restored him to health.

## CASE IV.

### DUODENAL DYSPEPSIA AND CONGESTION OF LIVER.

A gentleman of nervous temperament, æt. 38, applied to me for advice during the summer of 1834. He had

for a very long period complained of a dull, aching sensation in the right hypochondriac region, extending to the shoulder blade of the same side, and had also suffered much pain and inconvenience after eating, however simple his food. Flatulence, distention, nausea, retching, colic, and alternately relaxed or constipated bowels, sleepless nights, depression of spirits, and loss of flesh were only a few of the ills with which that protean malady, indigestion, assailed him. The usual routine of blue pill and stomachic medicines had been most assiduously followed, but without any permanent relief being obtained.

I recommended him to take a course of Carlsbad waters, cupping over the region of the liver; and a smart aperient being premised. A strict observance of a well regulated diet was also enjoined. At the end of ten days the patient complained bitterly of a rheumatic pain, extending from the right shoulder to the tips of the fingers, and of a loss of power in the arm itself. He was with difficulty persuaded to continue the waters. The pain rather increased than diminished, for several days, but subsequently subsided as the secretions of the liver became more natural. This gentleman was gradually restored to health, and continues well.

During the period he was taking the waters a circumstance occurred which it is well to mention. Notwithstanding the strict injunctions with regard to diet, the patient was tempted to commit an act of indiscretion in this particular, the result was that he was attacked in the middle of the night with intense pain in the region of the duodenum, on which account I was called to him.

A subsequent and similar imprudence entailed upon him a similar and equally severe punishment.

This case is instructive in exemplifying that mineral waters must not be trifled with, and that the directions laid down by the medical attendant with regard to diet, are the results of actual experience, and not so many rules arbitrarily imposed upon the patient without rhyme or reason, merely for the sake of mystification and wonderment.

I have again and again seen the most formidable diarrhæa and colic produced by the mineral-water-drinker imprudently partaking of strawberries, salads, cucumbers, or ices.

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## CASE V.

INTENSE NEURALGIA OF THE LARYNGEAL BRANCH OF THE  
SPINAL ACCESSORY, RADIAL AND ULNAR NERVES  
CONSEQUENT UPON SEVERE SPINAL IRRITATION.

The subject of this painfully interesting case was an exceedingly intelligent, unmarried lady,

æt. 34, of a highly cultivated, and well regulated mind, who consulted me in the winter of 1835, on account of the distressing symptoms enumerated below.

She complained of intense suffering in the *trachea* upon the *slightest noise*, to which part all SOUNDS were referred. In short, she heard, and most painfully too, if the expression may be allowed, with her windpipe. A rap at a door, a cinder falling from the grate upon the fender, or any other common noise, I have seen again and again occasion copious lachrymation, not the crying of an hysterical girl, but a flow of tears evidently occasioned by intensity of pain. The report of a gun would as fairly fell her to the ground as if she had been "violently struck on the back of the neck by the arm of a powerful man."

She suffered much from pain in the course of the ulnar and radial nerves of the left arm concentrating itself especially, however, in the thumb.

Her sufferings, which had been of long standing, entirely prevented her attending to her usual avocations as a governess. She could only exist in the still and calm of a retired country retreat, where her hours were, from necessity, generally passed in perfect solitude.

She attributed her neuralgic symptoms to an acute attack of *cynanche trachealis*, the consequence of a long and hurried walk during the prevalence of a cold northeasterly wind, as, from that time, her windpipe became daily more and more sensitive to sound.



I found, upon examining the spine, that pressure upon the cervical and upper dorsal vertebræ produced acute pain in the windpipe, arm, and thumb.

Her pulse was feeble, and more frequent than natural; catamenia regular: her countenance and general appearance bespoke constant and intense suffering.

Every remedy which skill and science could devise, had been unavailingly employed, including quinine, arsenic, carbonate of iron, prussic acid, &c., &c.

Leeches, blisters, and moxas, were repeatedly employed by my direction; and belladonna, stramonium, veratria, and aconite, exhibited internally, and applied externally to the painful parts. Latterly, a seton was introduced.

As her symptoms were only temporarily relieved by this plan of treatment, a course of Carlsbad water was next recommended. Of these she took two lengthened courses during the summer and autumn of 1836, and was, at the expiration of the second course, able to resume her duties and tolerate even the practice of the children upon the pianoforte.

I saw this lady last winter. She was then in the enjoyment of very tolerable health, and was only subject to slight threatenings of her former symptoms after any great physical exertion, such as a long walk or a journey in a stage coach.

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## CASE VI.

## AFFECTION OF THE MESENTERIC GLANDS.

A delicate child, *Æt.* 3<sup>1</sup>/<sub>2</sub> years, who had suffered for upwards of six months from a severe attack of infantile fever, became subsequently the subject of mesenteric derangement. His appetite was most inordinate, and his pulse rapid. His tongue was coated, the tip and edges red, breath heated and offensive, bowels costive, urine copious, pellucid, and acid. There were colliquative sweats and extreme emaciation.

Mercurial remedies, and other appropriate means, had been persevered in for many months, the symptoms rather increasing than diminishing. His case was considered desperate.

A course of Obersaltzbrunnen water, combined with Ems, was commenced during the summer of 1835.

At the end of ten days, the bowels and liver began to secrete pretty copiously a kind of semi-solid matter, which was frequently passed during the twenty-four hours.

The symptoms began now to subside, the tongue cleaned, the pulse improved, the urine diminished and became less acid, the craving for food ceased, the child plumped up, regained his strength and health, and is now, July, 1840, perfectly well.

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## CASE VII.

## ERUPTION OF THE FACE AND HEAD.

A young lady, otherwise of prepossessing appearance, had been afflicted several years with an occasional eruption on the head and face of a strumous character. Various remedies and cosmetics had been employed, but without the desired end being obtained. A course of Kreuznach water completely removed the disease.

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## CASE VIII.

HYSTERIA DERANGING THE FUNCTIONS OF THE SPINAL  
CHORD AND EIGHTH PAIR OF NERVES, WITH ITS  
RECURRENT LARYNGEAL BRANCHES.

A young, unmarried lady, applied to me in the summer of 1836, on account of a sensation as though a sharp plum-stone or fishbone were sticking across the larynx, and threatening, upon every act of deglutition, to pierce the skin covering this part and make its escape.

She also suffered much from a constant, painful, and irresistible desire for food, without any ability on the

part of the stomach to digest that which she was compelled to take. The Catamenia were regular.

Hydrocyanic acid and various other remedies were exhibited without any relief being obtained. Leeches and blisters were also applied to the spine, but with only partial relief.

A course of Carlsbad waters was next recommended. The symptoms were much increased for a time, especially during a smart attack of fever (the "*bad-sturm*"), which came on towards the end of the course. The symptoms after this gradually lessened and disappeared.

## CASE IX.

### CONGESTION OF LIVER, WITH COUGH.

A young unmarried woman, of bilious temperament, had for many months been suffering much from cough, with loss of flesh, appetite, and spirits. Her friends were apprehensive of the results, and had, indeed, been told she was consumptive.

She had considerable tenderness of the right hypochondriac region, coated tongue, scanty and high-coloured urine, and obstinately costive bowels. Catamenia natural.



Believing the cough to depend solely upon congestion of the liver, which opinion was strengthened upon examining the chest by the stethoscope, I at once directed her to take a course of the Carlsbad waters. The happiest results followed. The cough left her, her bowels became regular, and she regained her flesh, health, and spirits.

During the succeeding spring, some of her former symptoms returning, she had recourse again to the waters, and with the like beneficial results.

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## CASE X.

### TIC DOULOUREUX OF HEAD, FACE, AND TEETH.

A young married lady, of spare habit of body, had suffered almost constantly for many months from severe hemicrania and a painful affection of the fifth pair of nerves. She had lost many teeth, and would willingly have submitted at my first visit to the loss of others, had I recommended her to do so, her pain being at that moment most agonising. I urged her to take the Carlsbad water, but it was not until she had again had recourse to morphia and other remedial measures to mitigate the severity of another attack, that she would consent to do so. Before the expiration of the course all her symptoms were entirely removed.

## CASE XI.

## DYSMENORRHAGIA.

The subject of this disorder, was a married lady of nervous temperament and spare habit of body, who had suffered from her earliest indisposition the *most violent pains* attended with *profuse* discharge. Every remedy and every means had been adopted which the first-rate talent could suggest, but to no purpose.

A course of Kissingen waters, combined with Ems, achieved that which no other measures had yet been able to effect, even partially. The pain became much less severe, whilst the other symptoms were diminished in an equal degree. A second course, during the following autumn, restored her to a better state of health than she had enjoyed for very many years.

This spring, the Ragozibrunnen of Kissingen exerts a most powerful influence over the female constitution, removing congestion and obstructions, alleviating pain, regulating the return and duration of the periods, and, in short, inducing a healthy action of the disturbed organs generally. In sterility they have been found exceedingly beneficial. Dr. E. Osann observes, of these waters, in his *Physikalisch-medicinische Darstellung der bekannten Heilquellen*, that they are pre-eminently serviceable in "Störungen der Funktionen des

Uterinsystems, Unregelmässigkeit der Menstruation, zu sparsamer, zu reichlicher, Unfruchtbarkeit, anamole Hämorrhoiden, Fluor albus,—insofern alle diese Beschwerden durch örtliche Schwäche, Stockungen und Plethora abdominalis begründet werden.”

They have also acquired a deservedly celebrated reputation through the writings of Siebold.\*

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## CASE XII.

### MENORRHAGIA.

An extreme case of this disorder came under my care last autumn. The patient, an unmarried female, suffered from repeated, profuse, and lengthened periods, with very short and very irregular intervals. She complained much of palpitations, of intense pain at the top of the head, and of general debility. Her pulse was small, frequent, and irregular. Her countenance perfectly yellow, whilst the conjunctivæ were of a bluish white.

Ausführliche Beschreibung der Heilquellen zu Kissingen von Dr. A. Eli von Siebold.—Berlin, 1828.

Her disorder had been considered to be jaundice, and the treatment had been in accordance with such opinion.

Under the continued use of the Kissingen waters, the interval between the periods became lengthened, the duration of each visitation diminished, and the secretion lessened. Her sallow appearance was displaced by red and white. She regained flesh, the palpitations ceased, and she left Brighton much amended in health.

## CASE XIII.

### AMENORRHŒA.

The subject of this case was a young lady, æt. 24, who applied to me for advice in November, 1839. She had suffered from a suppression of her accustomed visitations during the preceding eighteen months, attended with all the ordinary concomitant symptoms, and for which the usual emmenagogue remedies had been unsuccessfully prescribed.

I directed her to take the Kissingen waters. At the end of six weeks, nature resumed her wonted office, and health speedily took place of disorder and suffering.

This patient continues perfectly well.



Were it necessary, many other cases might be adduced, to shew the power of factitious mineral waters in exterminating disease, and in invigorating the human constitution.

In conclusion, allow me to express to the Proprietors of this establishment, through you, my deep obligations for renewed health, derived not only by myself, but by several members of my family, from the use of the factitious mineral waters so admirably prepared under your direction.

I have the honor to be,

Dear Sir,

Your obedient servant,

JAMES PICKFORD.

1, Cavendish Place, Brighton,  
28th July, 1840.

To G. Schweitzer, Esq.,  
Director,  
Royal German Spa, Brighton.

TABLE OF ANALYSES OF SOME OF THE PRINCIPAL MINERAL WATERS PREPARED AT THE ROYAL GERMAN SPA,  
BRIGHTON.

GRS. OF ANHYDROUS INGREDIENTS IN ONE POUND TROY.	CARLSBAD.	EMS.	MARIEN- BAD.	KISSIN GEN.	SARATOGA.	SCHLES- SCHER.	EGER.	PYRMONT.	SPA.	PULLNA.	SEID- SCHUTZ.
Carbonate of Soda .....	7.2712	8.0625	5.3499	..	0.8261	7.6211	3.8914	..	0.5531	..	..
Ditto of Lithia .....	0.0150	0.0405	0.0858	..	..	..	0.0282	..	..	..	..
Ditto of Baryta .....	..	0.0022	..	..	..	..	..	..	..	..	..
Ditto of Strontia .....	0.0055	0.0080	0.0028	0.0592	0.0672	0.0170	0.0023	4.7781	0.7387	0.5775	5.1045
Ditto of Lime .....	1.7775	0.8555	2.9509	4.8180	5.8531	1.5464	1.3501	..	0.8421	4.8045	0.8235
Ditto of Magnesia .....	1.0275	0.5915	2.0390	1.3185	4.1155	1.5496	0.5040	..	0.0389	..	0.0032
Proto-Carb. of Manganese	0.0048	0.0028	0.0288	0.0121	0.0202	0.0026	0.0322	0.0364	0.2813	..	0.0095
Proto-Carb. of Iron .....	0.0208	0.0120	0.1319	0.1397	0.0173	0.0356	0.1762	0.3213	0.0102	0.0026	0.0117
Sub-Phos. of Lime .....	0.0012	..	..	..	..	..	0.0172	..	0.0064	..	0.0088
Ditto of Alumina .....	0.0019	0.0014	..	..	..	..	0.0092	0.0110	0.0593	3.6000	3.6705
Sulphate of Potassa .....	..	0.4050	28.5868	1.2540	0.1379	2.5106	18.3785	1.6092	0.0281	92.8500	17.6220
Ditto of Soda .....	14.9019	..	..	..	..	..	..	0.0067	..	..	..
Ditto of Lithia .....	..	..	..	..	..	..	..	5.0265	..	1.9500	1.1287
Ditto of Lime .....	..	..	..	5.5485	..	..	..	0.0154	..	..	0.0347
Ditto of Strontia .....	..	..	..	..	..	..	..	2.3684	..	69.8145	62.3535
Ditto of Magnesia .....	..	..	..	..	..	..	..	..	..	..	5.9302
Nitr. of Magnesia .....	..	..	..	..	0.1004	..	..	..	..	..	..
Chlor. of Ammonium .....	..	..	..	0.0364	0.0326	0.0164	..	..	..	..	..
Ditto of Potassium .....	..	0.0338	..	..	1.6256	..	..	..	..	..	..
Ditto of Sodium .....	5.9820	5.7255	10.1727	39.3733	19.6653	0.8682	6.9229	..	0.3371	14.7495	1.2225
Ditto of Magnesium .....	..	..	..	3.6599	..	..	..	0.8450	..	..	..
Bromide of Sodium .....	..	..	..	0.3331	0.1613	0.0051	..	..	..	..	..
Iodide of Sodium .....	..	..	..	..	0.0046	..	..	..	..	..	..
Fluoride of Calcium .....	0.0184	0.0014	..	..	..	..	..	..	..	..	..
Alumina .....	..	..	0.0023	..	0.0069	..	..	..	..	..	..
Silica .....	0.4329	0.3104	0.2908	0.1609	0.1112	0.2423	0.3548	0.3727	0.3739	0.1320	0.0900
Total .....	31.4606	16.0525	49.6417	56.7136	32.7452	14.7309	31.6670	15.4221	3.2691	188.4806	98.0133
Carbonic Acid Gas in } 100 cubic inches ... }	58	51	105	96	114	98	154	160	136	7	20
Temperature (Fahr.)	Sprud. 165° Neu. 138° Muhl. 128° Ther. 122°	Kessel. 117° Kränchen 81°	Kreutz. 53°	Ragozi. 53°	Congress. 58°	Obersalz. 58°	Franzens. 54°	56°	Pouhon. 50°	58°	58°
Analysed by	Berzelius	Berzelius	Berzelius	Siruvo	Schweitzer	Struve	Berzelius	Siruve	Struve	Struve	Siruve

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